

**Evaluation of the Region 1
Drinking Water Laboratory Certification Program**

by the

**Office of Ground Water and Drinking Water
Technical Support Center**

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U. S. ENVIRONMENTAL PROTECTION AGENCY

Cincinnati, Ohio 45268

Introduction

The “Manual for the Certification of Laboratories Analyzing Drinking Water” requires the Office of Ground Water and Drinking Water (OGWDW) to “review the Regional drinking water certification programs annually and evaluate the resources and personnel available in each Region to carry out the certification program.” Paper reviews in the form of questionnaires are done annually with on-site reviews conducted triennially. Judith Brisbin and Jennifer Best of the Technical Support Center (TSC) performed a Quality System Assessment (QSA) of the Region 1 Drinking Water Laboratory Certification Program on October 20-22, 2008 at the Region 1 office in North Chelmsford, MA. The on-site evaluation is conducted to assess the adherence of the EPA Regional Certification Authority to the requirements of the “Manual for the Certification of Laboratories Analyzing Drinking Water,” Chapters I – III, Fifth Edition, EPA 815-R-05-004, 2005, and any subsequent Supplements to this Manual. The QSA included a review of documents and discussions with Arthur Clark, Regional Laboratory Certification Program Manager for Region 1.

Quality and Timeliness of State Laboratory Audits

Principal State Laboratory (PSL) audits for Chemistry, Microbiology and Radiochemistry are to be conducted on a 3-year cycle as described in the “Manual for the Certification of the Laboratories Analyzing Drinking Water” (Laboratory Certification Manual or LCM). Along with PSL audits, assessment of the State laboratory certification program should be performed, as outlined in Chapter III of the LCM. The chart below gives the last dates audits were performed of the PSLs and drinking water laboratory certification programs for the States in Region 1:

STATE	LAST AUDIT OF PRINCIPAL STATE CHEM LAB	LAST AUDIT OF PRINCIPAL STATE MICRO LAB	LAST AUDIT OF PRINCIPAL STATE RAD LAB	LAST DW LAB CERT PROGRAM AUDIT
CT	February 2008	February 2008	March 2006	2008
MA	February 2007	February 2007	Not certified	2007
ME	NELAP (NH ELAP) June 2008	NELAP (NH ELAP) June 2008	NELAP (NH ELAP) May 2007	2007
NH	NELAP (NH ELAP) November 2007	NELAP (NH ELAP) November 2007	NELAP (NH ELAP) May 2007	2008
RI	April 2007	April 2007	Not certified	2007
VT	NELAP (NH ELAP) August 2008	NELAP (NH ELAP) August 2008	NELAP (NH ELAP) May 2007	2006

CT: Connecticut Department of Public Health (CT DPH) – Chemistry, Microbiology, Radiochemistry.
MA: Massachusetts Department of Environmental Protection (MA DEP) – Chemistry and Microbiology; CT DPH – Radiochemistry.
ME: Maine Department of Health & Human Services (ME DHHS) – Chemistry, Microbiology, Radiochemistry.
NH: New Hampshire Department of Environmental Services (NH DES) – Chemistry, Microbiology, Radiochemistry.
RI: Rhode Island Department of Health (RI DOH) – Chemistry and Microbiology; CT DPH – Radiochemistry.
VT: Vermont Department of Health (VT DOH) – Chemistry, Microbiology, Radiochemistry.

Audits of PSLs in Connecticut, Massachusetts and Rhode Island are conducted by Mr. Clark. All 3 States have their own chemistry and microbiology certifications while CT DPH serves as the PSL for radiochemistry for all three. There are no contracted laboratories that are part of a PSL for any State in Region 1. A Standard Operating Procedure (SOP) is in place that describes how Region 1 audits PSLs and reviews State laboratory certification programs.

The remaining three states (Maine, New Hampshire, and Vermont) in Region 1 are accredited by NH ELAP. Mr. Clark assists NH ELAP in assessing the PSLs in these States. Copies of the accreditation certificates are on file with Region 1. Region 1 is to be commended as all PSL certificates and audits are up-to-date and appear to be consistently conducted on a timely schedule.

Reviews of State Certification Programs

On an annual basis, TSC sends a questionnaire to all of the Regional Laboratory Certification Program Managers (LCPMs) regarding the status of the certification program in the States within their Region. Mr. Clark forwards this questionnaire to the States in Region 1. This serves as an annual program review for the states in Region 1, while on-site reviews of the state programs occur on a triennial basis.

Reviews of the Drinking Water Programs in all six States in Region 1 are conducted by Mr. Clark according to a procedure that is documented in an SOP. All reviews are conducted on a triennial basis and are documented in the Regional files.

Regional Certification Program Files

Files from all of the States in Region 1 were reviewed and found to be impeccably organized and very complete. All of the files contained copies of the most recent certification letter along with a list of methods and analytes for which the laboratory was granted certification. The files also contained many examples in which the States informed Mr. Clark of changes, such as State laboratory personnel and laboratory equipment. The audit team made note of the certification letters issued by Mr. Clark. Mr. Clark issues the certification letters annually and in doing so, places an expiration date on each year's letter. This is a good practice - one that OGWDW laboratory certification team will recommend to other regional programs.

Communications with State Counterparts

A conference call with the Region 1 States is held on at least a triennial basis in conjunction with the TSC program audit of Region 1. A teleconference was held on October 29, 2008 and was well attended by the States in Region 1. Only one State, Vermont, was unable to attend due to a scheduling conflict. In recent years, Region 1 has conducted on-site conferences with all of the Region 1 states attending, however this year the meeting was conducted via teleconference due to travel restrictions for state personnel. Mr. Clark fosters communication between the States in Region 1 by holding periodic conference calls with them, the last of which was held on June 2, 2008. We strongly encourage Region 1 to continue this practice.

Mr. Clark and Region 1 are to be commended for fostering an atmosphere of collaboration and communication among the laboratory certification program personnel in the Region 1 states. It is evident that the state personnel respect Mr. Clark and keep him informed of all changes/issues that arise in their state laboratories and programs.

Resources

It is very evident that Region 1 is committed to supporting the drinking water laboratory certification program. We appreciate the support Mr. Clark receives in the form of personnel and travel resources. We believe this support encourages the maintenance of a strong laboratory certification program, both within the region and the state programs. This support also allows Mr. Clark to take a proactive approach to certification issues, as evidenced by his recent draft of a policy on provisional certification.

ACTION ITEMS:

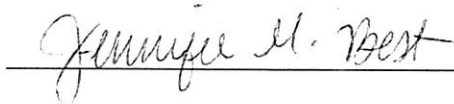
There are no mandatory corrective action items. However, we do have several recommendations:

- Any Certification Officers (COs) who have not recently attended the laboratory certification course are encouraged to return to audit the course. There is a substantial amount of new information, as many regulations and other information pertaining to the Drinking Water program have changed in the last few years. Attendance at this course helps to strengthen the laboratory certification programs.
- Region 1 should continue to monitor the number of COs each state has in order to help judge whether there are adequate resources for the number of certified laboratories. The review team notes that New Hampshire currently has two COs responsible for the accreditation of approximately 80 laboratories under the NHELAP program. Potential shortages should be investigated to keep them from becoming an impediment to the maintenance/growth of the program.
- As discussed during the audit, some SOPs need to be updated. Please forward copies to Judy Brisbin when completed.
- Region 1 should discontinue the practice of listing volatiles on their certificates as "20 regulated volatiles." Regulated volatiles should either be listed individually by name or via a footnote stating that the analyte listing of "20 regulated volatiles" refers to the compounds listed in 40 CFR 141.61(a) with the exception of vinyl chloride (which is listed separately).

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